

RESEARCH ARTICLE

Higher Education Institution Organizational Climate Survey

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Abstract

Leadership has a critical influence regarding the behaviour and organizational climate. The leader must be able to make the organizational climate conducive to increasing the workers' productivity, to team managing, to encouraging motivation, to making effective use of the resources and to developing trust in people, and has an impact on the collaborators' psychological contract. This study aims to understand the behaviour and organizational climate of a Higher Education Institution, seeking to capture the leader-collaborator relationship. A total of 133 collaborators participated in the study. The study took place in Polytechnic of Guarda localised in Interior Centre of Portugal. A questionnaire survey was conducted, comprised of questions that reflected the key variables and dimensions of this study namely: Performance Assessment, Leadership, Working Conditions, Benefits, Motivation, Satisfaction, Interpersonal Relationships, Training, Commitment and Functions. Factor analysis of the main components was used for the creation of these dimensions. The results point to the existence of a positive relationship between the organizational units' leadership of the institution, and the satisfaction of the collaborators, thus indicating significant differences between the organizational units as far as leadership and satisfaction by career type and qualifications are concerned.

Keywords: *Leadership, Organizational Behaviour, Organizational Climate, Psychological Contract.*

Introduction

Individual behaviour influences organizational behaviour [1]. In turn, according to the model developed by Likert [1] organizational characteristics, particularly management practices, structure and leadership style, influence attitudes, motivations, satisfaction and decisions of its collaborating members, acting on productivity behaviour and involving the organization goals [2].

Indeed, "in order to understand the behaviour of people, it is necessary to understand that they live and behave in a psychological field and try to reduce their dissonance in relation to the environment" [3].

The various situational factors and behaviours adopted by people reflect the organizational climate and it is therefore "necessary to keep in mind that for some, the climate is seen as reasonable, and for others it is less positive, which hampers consensus on the introduction of

management policies to adopt, particularly in people management"[4].

Thus, according to Katz and Kahn [5], the organizational climate reflects the organization's universe, the kind of people that the organization attracts the work methodologies and the physical layout, the communication processes and the type of leadership exercised in different hierarchical levels. In this context, the question is how to define the climate and how this can influence personal performance and behaviour and the productivity of organizations?

In view of the above, with this study we intend to advise all collaborators with leadership responsibilities and functions to the particularity of any obvious aspects of the organizational climate that are indicators of the type of leadership exercised, of the kind of «leader-member» relationship practiced, by giving them, on the one hand, an opportunity to correct actions

which are more abusive and less favourable to the organization, and on the other hand, the possibility of fostering more satisfactory interpersonal relationships.

Therefore, our goal is to assess the existence of a connection between leadership and organizational climate, and evaluate, in the particular case of the Guarda Institute Polytechnic (IPG), the psychological relationship between leadership and collaborators. In this sense, we begin with a brief literature review, after which the methodology used in the study is defined, and finally, the results are analysed and the conclusions revealed.

Literature Review

The concept of organizational climate refers to a set of organizational practices, objectively evaluated [6], which influence attitudes, values and perceptions of the people who are part of it, as well as productivity and interpersonal relations highlighted by them [7,8].

The organizational climate is the quality of the organizational environment perceived or experienced by the organization members and which influences their behaviour [3, 9].

Organizations tend to attract and keep people who adjust to their climate, so that their standards are preserved. Therefore, it follows that the climate will be an important variable, because of its influence not only on organizational phenomena, but also on the behaviour of individuals when integrated in the organizational context.

The economic and cultural environment as well as the organizational and individual variables are obvious determinants of the organizational climate. The constant satisfaction of individual needs and emotional balance is the main motivation for the behavioural development of the individual, this being the process that leads to the construction of the organizational climate.

Motivation - at an individual level - leads to the organizational climate - the organization level. Thus, "the organizational climate is closely related to the degree of motivation of the participants, given that when there is great motivation among members, the motivational climate rises and translates into satisfaction, energy, interest, and collaboration relationships" [3].

Human needs arise from the interaction with the environment, with motivation as a dynamic

component in human behaviour. No matter how much motivation is an internal process to the individual, it is concluded, however, that the environment contributes to its evolution, since it is from it that individuals build their reality.

The satisfaction of individual needs, which may be either physiological or safety-related (vegetative needs) as well as social, esteem or self-fulfilment related (higher needs), rely heavily on the interpersonal relationships with people who are in higher hierarchical levels (leadership), who are responsible for understanding the motivations of individual employees, as well as their needs and the consequent behavioural adjustment of each individual.

People are continually prompted to adequate to a variety of situations in order to meet their needs and maintain an emotional balance. This adjustment requires not only the satisfaction of physiological needs or safety, but it also involves the need to belong to a close social group for self-fulfilment. Hence it turns out that the organizational climate is closely linked to the degree of the participants' motivation [10]

When there is a high degree of motivation, there is a climate of satisfaction, interest and collaboration. Conversely, when there is frustration or barriers to the satisfaction of needs, the organizational climate tends to be worse, characterized by apathy states, sometimes leading to depression (see Fig. 1).

The concept of organizational climate translates the environmental influence on the motivation of individuals, and it can be described as the quality of the organizational environment regarded by each individual, which will influence their behaviour within the organization.

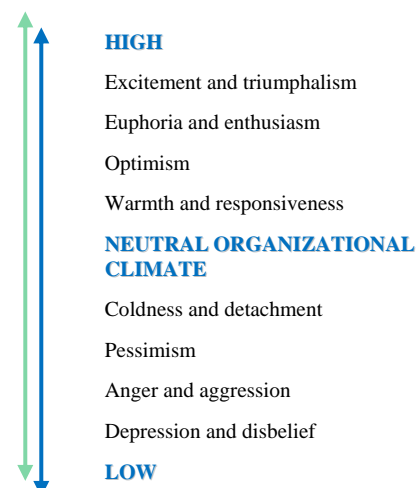


Fig. 1: Organizational climate levels

Source: Adapted from Chiavenato [10]

For Atkinson, cited by Chiavenato [11], there are two situational or environmental motivation determining factors: expectancy and incentive value. Expectancy has to do with the subjective probability of the needs satisfaction - or its frustration and incentive value relates to the amount of satisfaction or frustration as a result of the verified person's behaviour.

The organizational climate, understood as the quality of the organizational environment

observable by members of the organization and that influences people's behaviour, comprises a broader and more flexible framework on the environmental influence on motivation (see Fig. 2). "In fact, the organizational climate influences people's motivational state and it is influenced by them" [10].

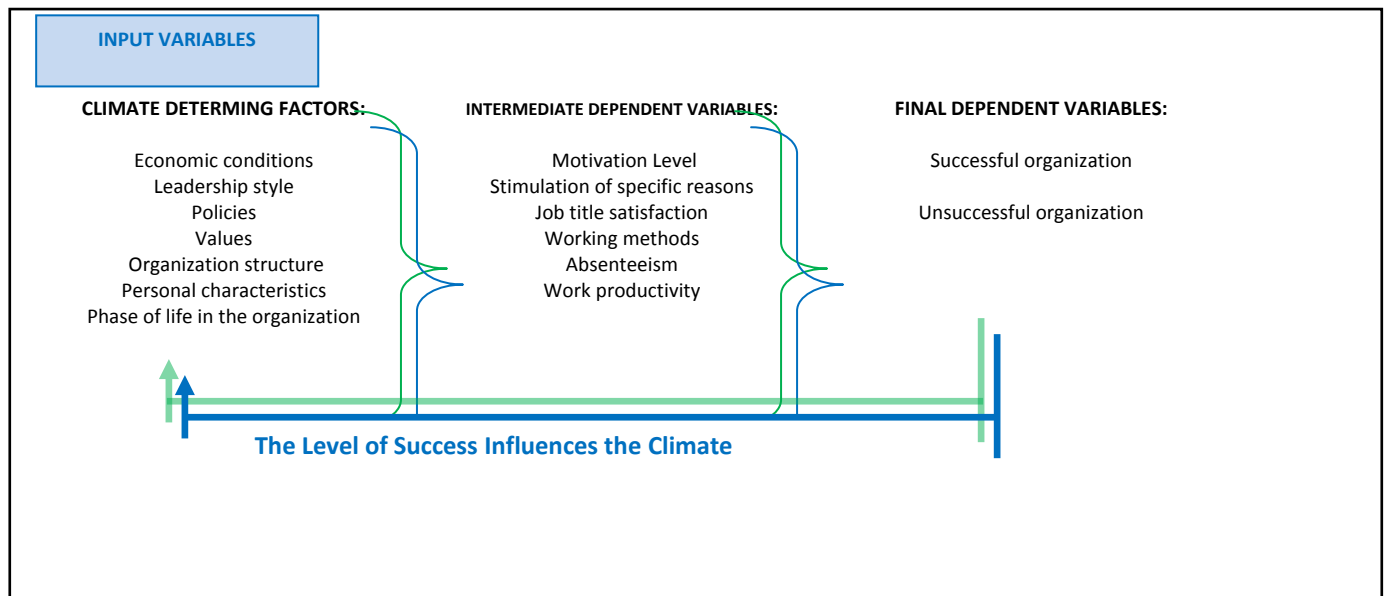


Fig. 2: Visualization of the organizational climate

Source: Adapted from Chiavenato [10]

Both leadership styles practiced and the organizational structure are important for the organizational climate, as they influence individual behaviour according to the needs of affiliation, power and achievement in the organization [12, 13].

The leaders are particularly relevant figures in promoting courage and brave organizational climates through the contagion effect, representing the emotional and moral muscle that permits facing difficulties and pursue ambitious new missions [14].

Moreover, the interpretation the individual makes of his work situation and of the leadership style interaction should also be emphasized and what this might mean in terms of individual satisfaction or organizational productivity [4].

In short, and according to Rego and Cunha [14], leaders also promote an organizational climate of psychological safety that induces people to take the initiative, take risks, learn from mistakes and innovate and reacquire their self-esteem, leading them to focusing energies on really important tasks and challenges.

Subsequently, translating the reasons identified by McClelland [12], Kolb, *et al.* [15] drew up a scale with seven organizational climate categories:

- Leadership (power);
- Responsibility (power);
- Organizational Clarity (realization);
- Performance standards (implementation);
- Rewards (affiliation);
- Human warmth (affiliation);
- Support (affiliation).

In this context the organizational climate is understood as the perception that seeks to measure the collaborators' grounds for satisfaction and the reasons for discomfort, so that it builds a work environment that strengthens the relationships of the collaborators with the organization, with their colleagues, with their teams and with their leaders, always looking for membership, motivation and the commitment of their staff [15].

Other authors, such as Litwin and Stringer [9], conclude that distinct organizational climates can be created by variation in the organizational leadership style and suggest three typologies:

Affiliate Climate, focusing on interpersonal relationships and the affective domain; Power Climate, where the needs for ascendancy and relationships with the management are studied and Achievement Climate, which depicts important aspects such as performance, goal achievement and career prospects.

Some organizational climates can be created in a short time and their characteristics remain stable. When this happens it has significant effects on motivation and hence on performance and job satisfaction [13].

In this context, the leader emerges as a builder of organizational environments that foster the removal of mental barriers and promote the adoption of new mindsets adjusted to the surroundings [16,17], creating socially favourable environments and climates, seeking to understand the extent to which members of a group are guided by mutual trust and affection [13].

Thus, effective leaders are always willing to assist and support their collaborators, being therefore obvious that such leaders express a greater interest on the climate and working environment. It's their task to continually assess the organizational climate, for the reason that, on the one hand, this allows for the emergence of countervailing power, and on the other hand, it reveals inexorably the lowest productivity, less satisfaction and increased stress [18], which is necessary to fight.

The behaviour of workers and organizations is ruled by an exchange relationship, and it is usually celebrated by an individual employment contract or a collective bargaining agreement, which expresses the mutual rights and duties of the workers and the organization.

Relationships between the parties involved in this exchange go beyond what is written in the formal contract, which accounts for the fact that, for the workers or the organization, the exchange meaning is a subjective experience for each participant in this relationship, affected by factors such as, among others, personal values, education, personal relationships, which merge to create, according to Rousseau and Schalk [19], a feature central to employment: the psychological contract [20].

Pereira [18] focuses on this issue as well, by labelling "organizational socialization" as the mutual adjustment between the organization's purpose and personal motivation. Such relationships, and how they model work, may be seen in contractual terms. However, it is not the legal employment contract, which, incidentally, is invoked only in extraordinary situations, but a tacit contract, in which the expectations of the organization about the person and the person about the organization that generate organizational behaviour (see Table 1).

The psychological contract definition, advanced by Thomas and Anderson [21] is based on a process of mutual expectations that the individual and the organization develop through the cooperation promoted by the managers. Garbarro [22] considers it a set of mutual expectations that relate to work (performance), roles, confidence and influence, established by tacit arrangement, but about which there is an agreement.

Pereira [18] notes that both authors wanted to emphasize that any manager, regardless of their position and the organization, always depends on the subordinates to carry out the work. Garbarro [22] has even stated that the more a manager rises in the organization, or has an increased level of responsibility, the more he becomes dependent on collaborators for the success of the organization.

Table 1: Psychological contract relationship between the individual and the organization

THE INDIVIDUAL EXPECTS TO GET AND THE ORGANIZATION EXPECTS TO GIVE	THE INDIVIDUAL EXPECTS TO GIVE AND THE ORGANIZATION EXPECTS TO GET
1. Salary	1. A day's work
2. Development opportunities	2. Loyalty to the Organization
3. Recognition and approval of the work performed	3. Initiative
4. Security and Benefits	4. Compliance with standards and regulations
5. Friendly and supportive environment	5. Efficiency at work
6. Justice	6. Flexibility and willingness to learn and develop
7. Meaningful and purposeful work	7. Creativity

Source: Pereira [18]

Besides, Bragança [20] emphasizes that the psychological contract arises with the development of work relationships and specifically when the worker performs his functions voluntarily. It can be considered, from the perspective of Levinson [23] as the sum of mutual expectations between the organization and the employee, which may be conscious, in association with the return expected by the employee (eg. salary), or unconscious, referring to issues such as career development or promotion.

It should be noted that the psychological contract is a mental model that people use to frame labour commitments and establish trust relationships with the organization, revealing an implicit set of expectations operating at all times between the members of an organization [20].

Thus, the psychological contract results from the interpretation and representation those workers have of their duties and rights according to the organization where they work [13,20,24]. It sets expectations about behaviour that go together with all the performance, and it is expected that the management treats its employees fairly, facilitating acceptable working conditions for a good performance, communicating clearly what is a fair working day and giving them an indication of how the employee is performing his obligations; and that employees comply, demonstrating a "good attitude and loyalty" towards the organization [20].

The manager or the leader is indeed primarily responsible for the correct development of the psychological contract [18]. Therefore, leaders must be prepared to manage individuals with very different psychological profiles, including the specificity and motivations underlying each of them [25].

Thus, the "authentic" leadership style is one that seems ideal for maximizing the positive psychological asset of individuals and organizations, leading them to fruition. Indeed a person's behaviour can only be fully understood if we understand that they live and behave according to the psychological field, which connects their various needs and in which they try to reduce their dissonance in relation to the environment.

The psychological contracts are divided into transactional and relational. The transactional psychological contract, in specific terms, according to Rousseau [19] quoted by Ferreira and Martinez

(2008: 126), emerges during the following conditions: adverse economic conditions; little work involvement; seasonal and/or temporary employment; limited involvement and participation; and little flexibility.

According to Bragança [20], "transactional contracts involve a specific economic condition as primary incentive (focus), and from the point of view of their duration they are typically closed (short-term), implying a reduced personal involvement in the job (inclusion), being static in their conditions (stability)."

As for the relational psychological contract, it is categorized, firstly, because it is perceived as a socio-emotional incentive adding to the economic one (focus); secondly, individuals perceive relationships as being more open and wish to maintain these as timeless; in the third place, the formal contract is perceived as involving the individual himself, combining not only professional aspects but also his personal life (inclusion). Finally, these contracts involve expectations that the relationship between the individual and the employer will change and develop over time (stability) [20].

So that the relational contract is established, Rousseau [26] points out that it will be necessary to check the following assumptions: Emotional involvement; Affective investment in human resources; Written and unwritten contract terms; Dynamic agreement in form and time; Possibility of career development; and prospects for long-term work.

To the extent that the formal contract established with the organization, open or fixed term, leads to the establishment of distinct psychological contracts in the organizations, in the future one can expect considerable innovation and experimentation in hiring [20,27].

Thus, Rousseau [19] developed a new version of the psychological contract, which presents intermediate characteristics between the two types of contract. It is called the « balanced contract», insofar as it seeks to establish a commitment between economic and emotional bonds, and assumes the following characteristics (table no. 2):

- Promotes the flexibility of workers;
- Average or long-term duration;
- Specification of a performance and objectives achieved based assessment;
- High emotional involvement

- Development of skills which promote employability;
 - Contract terms subject to evolution.
- taking into account intermediate features such as focus, shape, values, responsibility and for the employer, contractual relations and career management.

Generically, table no. 2 summarises the past and emerging forms of the employment relationship,

Table 2: Past and emerging forms of the employment relationship

CHARACTERISTICS	RECENT PAST	EMERGING FORMS
Focuses	Security; continuity; loyalty	Change; future employability
Form	Structured and predictable	Flexible, open to renegotiation
Values	Tradition; equity; social justice; socioeconomic class	Market forces; skills and knowledge; added value
Employer Responsibility	Continuity; security; training; career prospects	Equity; reward for value added
Employee Responsibility	Loyalty; attendance; compliance with rules; positive performance	Proactive capability; innovation; excellent performance levels
Contractual relationships	Formalized	Individual responsibility, career development through new skills and training
Career Management	Responsibility and Organization; internal careers planned and directed by the HR department	Individual responsibility to manage / negotiate their services (internally and externally)

Source: [20]

Hypothesis and Methodology

This study aims to understand the behaviour and organizational climate of a Higher Education Institution, seeking to capture the leader-collaborator relationship. In addition, we intend to contribute to the improvement of the processes of leadership and internal management of the organization under study, as well as contribute to the improvement of the organizational climate and the relationship between leaders and subordinates. The choice of this topic is of personal interest, given the fact that the organizational climate is a factor of paramount importance in the daily management of the human resources, with the result that the leaders should pay more attention to it.

Given the above, the objectives of this study are the assessment of the existence of a connection between leadership and organizational climate, and assess, in the particular case of the Polytechnic Institute of Guarda, the psychological relationship between leadership and collaborators.

To this end, it became vital to apply a survey-based data collection instrument, in order to understand the extent to which the wholesomeness of the organizational climate is affected by leadership. Thus, one starts with a basic question: is leadership an influencing factor in the behaviours highlighted by collaborators at the level of motivation, attitudes and

commitments (psychological contract) assumed with the organization?

Ferreira and Martinez [13] argue that "the climate has several features, which then makes it difficult to operationalize theoretically resulting in a model that is comprehensive. If, on the one hand, the climate denotes some subjectivity in its description and evaluation, it is no less true that it appears real and objective for those who work every day in the organization."

The organizational climate study involves the research of certain dimensions. Taking into account the aspects that may influence organizational climate behaviours and the literature review, the following dimensions were considered for the study in question: the psychological contract with the organization, the relationship with the person in charge, interpersonal relationships, motivation and satisfaction, working conditions, and the training and performance assessment.

Factor analysis of the main components was used for the creation of these dimensions. With the application of the factor analysis we aim to reduce very complex measured data to a measurable dimension, so that the researcher can better interpret the results [28]) and thus generate a reduced number of variables which represent most of the variability in the original data and which can be used in subsequent analyses [29].

Factor analysis examines the correlations between the variables of a set of variables. It results in the specification of a set of factors that are the variables defined by linear combinations of the variables under consideration which, in theory, will explain how the initial variables are correlated [30]. The purpose of factor analysis is to reduce the number of variables for an easier interpretation. However, this analysis requires a KMO (Kaiser-Meyer-Olkin) measure of suitability, exceeding 0.5, for a significance level less than 0.05, since otherwise there is no correlation between the variables. Indeed, according to Pestana and Gageiro [31] the KMO varies between 1 and 0, comparing the correlations with the simple partial observed between the variables and the KMO near 1 indicates small partial correlation coefficients, being classified as very good, while values below 0.5 are unacceptable.

Following the analysis we proceeded to the intersection of the variables using ANOVA analysis and the application of group average differences tests in order to assess the influence of contextual variables related to the organizational units of the Guarda Polytechnic Institute (IPG), to the type of career and qualifications of collaborators and test the following hypotheses:

H1: The results of the Organizational Climate varies according to the Organic Unit;

H2: The results of the Organizational Climate varies depending on the type of career collaborators;

H3: The results of the Organizational Climate vary depending on the qualifications of the collaborators.

The correlation of the dimensions defined for the IPG's organizational climate through the use of the Person Correlation Matrix (r) in order to analyse the degree of association between all dimensions was also carried out.

The study population consists of 363 collaborators (239 teaching staff and 124 non-teaching staff), which directly carry out functions in the various organizational units of the Polytechnic Institute of Guarda (School of Education, Communication and Sport, School of Technology and Management, School of Tourism and Hospitality, School of Health and Central Services), to whom the questionnaire was applied. Data collection occurred between 15 and 29 May 2013, having

been collected 133 questionnaires (properly filled out). Thus, the sample consists of 133 collaborators, representing 36% of the population.

Data Analysis and Discussion of Results

To study the organizational climate in a Higher Education Institution, the IPG in particular, we used a sample of 133 institution collaborators which represent 36% of the population. In order to assess the profile of the respondents and to observe the perception that they hold in relation to the questions posed, we begin with a brief characterization of the sample.

The sample consists mainly of individuals aged 40-49 years (51.1%), followed by the 50-59 years age group (22.6%), indicating some degree of maturity. Afterwards there is a population aged 30-39 years (18.8%), followed by a minority of less than 29 years old (3.8%), which may represent collaborators with recent working relationships with the institution.

The organization under analysis is a Higher Education Institution, presenting two distinct careers: 'teaching' and 'non-teaching'. As for the sample under analysis, it consists of 47.4% of non-teaching staff and 51.1% of teaching staff.

As for academic qualifications, the surveyed sample mostly possesses Masters (38.3%), followed by individuals with the twelfth grade (23.3%), comprising the non-teaching staff. It was also found that 19.5% of the collaborators are degree holders, and among these, some are part of the teaching career, although most are non-teaching staff with a superior technical function. Regarding collaborators with a PhD, the measured percentage is 10.5%.

Regarding the sample surveyed by the IPG organizational units, the comparison between the surveyed sample and the population in relation to the workplace (Table n. 3) shows the absence of significant differences between them, concluding that the collected sample and the population are homogeneous.

Thus, from the analysis of Table n.3, it can be stated that the sample surveyed is distributed mostly by collaborators from the School of Technology and Management (ESTG) (34.1%), followed by the General Services (GS) (25.0%), the School of Education, Communication and Sport (ESECD) (15.9%), the School of Tourism and Hospitality (ESTH) (13.6%) and, finally, the School of Health (ESS) (11.4%).

Table 3: Comparison between the population and the sample of collaborators per organic unit

Workplace	Population		Sample	
	Frequency	%	Frequency	%
ESTH	37	10,20%	18	13,60%
ESS	68	18,70%	15	11,40%
ESECD	61	16,80%	21	15,90%
ESTG	123	33,90%	45	34,10%
Central services	74	20,40%	33	25,00%
Total	363	100,00%	132	100,00%

[Chi-square= 6,806 (p>0,05)]

Source: IPG Personnel department 2012.

The study of the organizational climate requires the analysis of certain dimensions. Taking into account the aspects that may influence behaviours in the organizational climate, and the 70 issues defined in the investigation, the following dimensions were built: Performance Assessment, Leadership, Working Conditions, Benefits, Motivation, Satisfaction, Interpersonal

Relationships, Training, Commitment and Functions.

A Person Correlation Matrix (r) was set in order to analyse the association degree between all the dimensions of the organizational climate (see Table 4), the data with statistically significant associations being in evidence.

Table 4: Correlation matrix of the organizational climate dimensions

Correlations

	Performance Assessment	Leadership	Working Conditions	Benefits	Satisfaction	Motivation	Interpersonal relationships	Training	Commitment	Functions
Performance Assessment	1	,565** ,000	,290** ,001	,489** ,000	,574** ,000	,119 ,187	,434** ,000	,488** ,000	,422** ,000	,188* ,035
Leadership	,565** ,000	1	,573** ,000	,300** ,001	,667** ,000	,417** ,000	,777** ,000	,737** ,000	,743** ,000	,559** ,000
Working Conditions	,290** ,001	,573** ,000	1	,000 1,000	,277** ,002	,402** ,000	,462** ,000	,468** ,000	,576** ,000	,456** ,000
Benefits	,489** ,000	,300** ,001	,000 1,000	1	,384** ,000	-,008 ,931	,226* ,012	,401** ,000	,400** ,000	,184* ,042
Satisfaction	,574** ,000	,667** ,000	,277** ,002	,384** ,000	1	,000 1,000	,655** ,000	,558** ,000	,470** ,000	,278** ,002
Motivation	,119 ,187	,417** ,000	,402** ,000	-,008 ,931	,000 1,000	1	,340** ,000	,307** ,001	,531** ,000	,667** ,000
Interpersonal relationships	,434** ,000	,777** ,000	,462** ,000	,226* ,012	,655** ,000	,340** ,000	1	,523** ,000	,674** ,000	,465** ,000
Training	,488** ,000	,737** ,000	,468** ,000	,401** ,000	,558** ,000	,307** ,001	,523** ,000	1	,645** ,000	,504** ,000
Commitment	,422** ,000	,743** ,000	,576** ,000	,400** ,000	,470** ,000	,531** ,000	,674** ,000	,645** ,000	1	,640** ,000
Functions	,188* ,035	,559** ,000	,456** ,000	,184* ,042	,278** ,002	,667** ,000	,465** ,000	,504** ,000	,640** ,000	1

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

According to the matrix we found that of the ten cross-variables, height showed positive correlations between them (evidencing the factors Performance Assessment, Leadership, Benefits, Satisfaction, Interpersonal Relationships, Training, Commitment, and Functions) and two show no significant statistical connections- Motivation and Working Conditions.

Motivation does not show a statistically significant correlation with the dimensions Performance Assessment, Benefits and Satisfaction. The dimension Working Conditions shows no statistically significant correlation with the dimension Benefits.

The use of factor analysis confirmed the various dimensions that can influence the IPG's organizational climate. This analysis requires a KMO (Kaiser-Meyer-Olkin) measure of suitability, exceeding 0.5; for significance level lower than 0.05, because otherwise it shows correlation between the variables [31]. All dimensions have a KMO above 0.7 and close to 1, indicating small partial correlation coefficients and are classified as medium and good (see Table 5). Table 5 also shows the total variance explained by the common set of variables (questions) that make up each component (see Appendix I).

Table 5: Organizational climate dimensions

	Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	Explained Variance Total
Performance Assessment	0,847	74,313
Leadership	0,933	62,547
Working Conditions and Benefits	0,745	66,142
Motivation and Satisfaction	0,804	73,705
Interpersonal relationships	0,854	72,217
Training	0,712	56,838
Commitment	0,926	57,034
Functions	0,747	47,116

One of the important aspects of this study involves understanding IPG's organizational climate, seeking to determine the perception of collaborators regarding the reasons for satisfaction and for discomfort concerning the institution, the colleagues, the teams they integrate and their leaders, trying to analyse the membership, the motivation and commitment of the staff towards the institution. In this sense, we tried to calculate the average of the various dimensions found (see Table 6).

By analysing the relative dimensions of the organizational climate, it appears that, on average, respondents share a positive

organizational climate, based on: a high collaborator commitment; training for the institution collaborators; healthy interpersonal relationships; motivated collaborators and a happy fulfilled relationship with the leadership.

Indeed, given the Likert-type scale (1 to 7), it was found that only the in the dimension Performance Assessment are the collaborators less satisfied, the average perception value for this dimension being at 4 [Neither agree nor disagree]. The remaining dimensions of the organizational climate present values that are between 5 [Mildly Agree] and 6 [Moderately Agree].

Table 6: Average of the dimensions under study

Dimension	Average
Performance Assessment	4,15
Leadership	5,4
Working Conditions and Benefits	5,07
Motivation and Satisfaction	5,5
Interpersonal Relationships	5,62
Training	5,34
Commitment	5,74
Functions	5,99

Furthermore, we sought to analyse the consistency of each component (dimension) through the Cronbach's Alpha test. Once this test takes a value near 0.9, it can be concluded that the alpha has a moderate to high acceptability [32].

The reliability estimate of the internal consistency type was obtained using the SPSS Scale Reliability Analysis procedure. According to Hill and Hill [33], the estimation of the Cronbach alpha internal reliability (α) (designated by alpha in SPSS) is considered good when the values are between 0.80 and 0.90. For values greater than 0.90 it is considered excellent.

The amount of internal consistency was found to be 0.885, which is therefore considered good.

The item-total statistics in Table 7 show the average and the variance of the scale if the item was to be excluded, the corrected item-total correlation, the squared multiple correlation (used to calculate the commonality in principal factor analysis) and the Cronbach alpha value resulting from the exclusion of the item. Benefits and motivation dimensions would be candidates for deletion if there was a very large reduction of the alpha or if the item-total correlation was very low, which is not the case.

Table 7: Item-total statistics

	Item-Total Statistics				
	Scale Average if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted	
Performance Assessment	-0,0304097	39,91	0,608	0,875	
Leadership	0,0214777	37,225	0,857	0,856	
Working Conditions	-0,0196242	40,987	0,511	0,881	
Benefits	0,0555651	43,264	0,319	0,895	
Satisfaction	0,0586063	40,17	0,578	0,877	
Motivation	-0,0391156	42,515	0,391	0,89	
Interpersonal relationships	0,0676327	38,011	0,735	0,865	
Training	0,0626761	38,042	0,753	0,864	
Commitment	0,0323477	37,308	0,833	0,858	
Functions	-0,0148975	40,155	0,622	0,874	

Following the analysis, we proceeded to the intersection of variables, in order to assess the influence of contextual variables - related to IPG's organizational units (schools), the type of career (teaching or non-teaching) and the collaborators' qualifications - on the results obtained in the different organizational climate dimensions: Performance Assessment, Leadership, Working Conditions, Benefits, Satisfaction, Motivation, Interpersonal Relationships, Training, and Commitment Functions.

The results show that the dimensions of the organizational climate aspects related to the organizational units showed influence only at the leadership and satisfaction level (see Table 8).

Indeed, for the various organizational units of the IPG, the only statistically significant differences ($p < 0.05$) appeared in the following dimensions: Leadership and satisfaction. For the other dimensions, the results are relatively close, with no statistically significant differences.

The ESTH and Central Services organizational units stand out from the rest with better values, that is, with greater average concordance values, indicating that, in these organizational units, the collaborators have a higher satisfaction level in these dimensions. Indeed, it is concluded that in these organizational units collaborators feel more identified with the IPG culture, feeling more emotionally attached to the institution and therefore part of it.

The results also show that the aspects related to the career type showed influence on the organizational climate dimensions only at the satisfaction level (see Table 9). Regarding the career type of the IPG collaborators the only statistically significant differences ($p < 0.05$) were found in the satisfaction dimension. As for the other dimensions, the results are relatively close, without statistically significant differences. So in this dimension, and according to teaching and non-teaching career type, it was concluded that the collaborators who are not teachers are the ones who have higher satisfaction levels.

Table 8: ANOVA-Average differences between organizational climate dimensions - organic unit

	Sum of Squares	Mean Square	F	Sig.	
Performance Assessment	7,006	1,752	1,795	0,134	
Leadership	14,849	3,712	4,099	0,004	ESTH>SC>ESTG>ESS>ESECD
Working Conditions	8,944	2,236	2,332	0,06	
Benefits	8,797	2,199	2,291	0,064	
Satisfaction	10,861	2,715	2,881	0,026	ESTH>SC>ESECD>ESS>ESTG
Motivation	2,689	0,672	0,665	0,618	
Interpersonal relationships	7,931	1,983	2,048	0,092	
Training	6,553	1,638	1,672	0,161	
Commitment	8,25	2,063	2,138	0,08	
Functions	0,601	0,15	0,146	0,964	

Table 9: ANOVA - Average differences between organizational climate dimensions - career type

	Sum of Squares	Mean Square	F	Sig.
Performance Assessment	1,774	1,774	1,771	0,186
Leadership	0,171	0,171	0,17	0,681
Working Conditions	1,13	1,13	1,123	0,291
Benefits	1,328	1,328	1,322	0,252
Satisfaction	3,848	3,848	3,928	0,05
Motivation	1,426	1,426	1,423	0,235
Interpersonal Relationships	0,141	0,141	0,14	0,709
Training	0,678	0,678	0,672	0,414
Commitment	0,897	0,897	0,889	0,348
Functions	0,076	0,076	0,075	0,784

By qualification level, there are only significant differences in the satisfaction dimension. In this case, the collaborators with higher qualifications

are the ones with lower satisfaction values (see Table 10).

Table 10: ANOVA - Average differences between organizational climate dimensions – qualifications

	Sum of Squares	Average Square	F	Sig.
Performance Assessment	1,663	0,416	0,413	0,799
Leadership	8,536	2,134	2,202	0,073
Working Conditions	1,613	0,403	0,392	0,814
Benefits	6,449	1,612	1,633	0,17
Satisfaction	17,465	4,366	4,89	0,001
Motivation	3,997	0,999	0,986	0,418
Interpersonal relationships	4,498	1,125	1,106	0,357
Training	4,733	1,183	1,164	0,33
Commitment	4,365	1,091	1,091	0,364
Functions	5,541	1,385	1,406	0,236

Conclusions

This study sought to examine the organizational climate of a Higher Education Institution, in particular in its organizational units, highlighting the importance of leadership in the development of the organization collaborators in the various actions they can take. It is noteworthy that the daily routines, both on a personal and a business perspective, can influence the people's behaviour and hence determine the dominant organizational climate.

At an organizational level, the need for leaders to possess charismatic characteristics is evident, so that they are able to enhance the influence process, as well as the motivation needed in their collaborators and therefore generate positive organizational climates. More than good pay and working conditions, the leader-member relationship grows in importance as the organizational life develops [34-37].

The psychological contract approach became relevant to the extent that a contractual relationship is not limited to a signed paper. Trust, mutuality, availability and satisfaction, demonstrated both by collaborators and leaders, become imperative factors to generate a beneficial organizational climate.

Regarding the organizational climate in Guarda Institute Polytechnic and its organizational units, and considering the different dimensions, it can be concluded that the organizational climate in the institution is clearly positive in terms of commitment and involvement of its collaborators in connection with the psychological contract, and as far as the interpersonal relationships, leadership, motivation, satisfaction and working conditions are concerned. Only performance assessment displayed less satisfaction, portraying achievement, achieving goals and career prospects as important aspects, as identified in the climate achievement of Litwin and Stringer [9] and Ferreira and Martinez [13].

Indeed, the results keep to what McClelland [12] defines as the organizational climate, envisaging the positive measurement and perception of the reasons for satisfaction and the reasons for the discomfort of the collaborators, in order to help build a work environment that strengthens the collaborator relationships with the company, with colleagues, with their teams and their leaders, always seeking membership, motivation and staff commitment.

Without a doubt, the involvement of people in the organization, the satisfaction revealed and the positive interpersonal relationships clearly confirm the existence of a positive organizational climate in the IPG as well as general feelings of recognition and sharing.

Results show that the dimensions of the organizational climate aspects related to the organizational units showed influence only at the level of leadership and satisfaction, testing for differences in the commitment of collaborators on these dimensions by organizational units of the IPG. The ESTH and Central Services organizational units stand out from the rest with better values, that is, with greater average concordance values, indicating that, in these organizational units, the collaborators have a higher satisfaction level in these dimensions. Indeed, it is concluded that in these organizational units collaborators feel more identified with the IPG culture, feeling more emotionally attached to the institution and therefore part of it.

Regarding the career type and qualifications of the IPG collaborators, influence on the organizational climate on the satisfaction level was also registered. Thus, according to teaching and non-teaching career type, it was concluded that the collaborators who are not teachers are the ones who have higher satisfaction levels. Also, the collaborators with higher qualifications are the ones with lower satisfaction values.

The following organizational climate dimensions show significant and positive associations between them: Performance Assessment, Leadership, Benefits, Satisfaction, Interpersonal Relationships, Training, Commitment and Functions while Working Conditions and Motivation do not show statistically significant connections.

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In terms of practical implications, this study contributes to a better understanding of the variables and dimensions that may influence the organizational climate in the organizational units of Higher Education Institutions. The study makes inferences about the conditions that are associated with the formation of a positive organizational climate for maintaining the wholesomeness required for organizational development, with the consequent collaborator satisfaction. Thus, in practical terms, it is necessary to promote leader-employee connections and promote good interpersonal relationships, so that the organization can achieve excellence and high performance levels, as well as finding solutions that increase both the satisfaction and the mobilization of collaborators with more qualifications in order to increase their commitment and motivation. The leadership must therefore endeavour to promote positive behaviours, highlight good management practices, and enhance the performance of the best collaborators.

In terms of limitations, this study is exclusively about a Higher Education Institution with a sample considered convenient since there is no official database on these issues. Thus, these peculiarities may limit the generalizability of the study results to all Higher Education Institutions. Hence, as indications for future research, we suggest the application of this study to other Higher Education Institutions, as well as other public institutions in order to analyse and confirm the dimensions and variables that influence the organizational climate of Public Institutions in general and of HEIs in particular.

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Appendix

Table a1- Component Matrixes

	Component 1 Performance Assessment
66. Personal performance is assessed regularly	0,568
67. Performance Assessment motivates and stimulates a healthy competitiveness between collaborators	0,883
68. Performance Assessment is an asset to the institution, being a fair and adequate process	0,928
69. Performance Assessment rewards top performers	0,936
70. Performance Assessment identifies the best talented professionals	0,936

Table a2- Component Matrixes

	Component 2,3	
	Working Conditions	Benefits
34. The working conditions are suitable for doing a good job	0,87	
36. I have access to training relevant to my functions / responsibilities	0,827	
35. I have at my disposal the resources necessary for the performance of my functions	0,822	
31. The social benefits provided by the IPG are nice		0,803
32. The payment is consistent with my functions / responsibilities		0,795
33. Working at IPG makes me I feel I have job security		0,573

Table a3- Component Matrixes

	Component 4 Leadership
25. The performance of the Board of Directors causes positive changes in the organizational climate	0,772
36. I have access to training relevant for my functions / responsibilities	0,519
40. I have a good working relationship with the director	0,821
41. The director demonstrates passion and communication skills	0,847
42. The director pays attention to my job	0,842
43. The director is available and attentive to my needs	0,828
44. I find it easy to talk with the director	0,752
45. The director promotes the autonomy of collaborators in decision making	0,824
46. The pressure exerted on me by the director is ethically appropriate	0,789
47. Events and changes are shared by all collaborators	0,787
48. There is a clear distribution of tasks and functions among collaborators	0,741
49. The director is concerned with the balance between work and personal life	0,755
50. I feel that my work is recognized and valued by the director	0,886
51. The director is prepared for the daily management of people	0,866
52. The director promotes interaction among all collaborators	0,8
53. The director demonstrates motivation and enthusiasm for my work	0,869
54. The internal environment of the IPG stimulates creativity	0,774
55. I feel motivated when my work is recognized by the director	0,687

55 Table a4- Component Matrixes

	Component 5,6	
	Satisfaction	Motivation
63. There is a common culture shared by all schools	0,934	
62. There is good communication and information sharing between schools	0,925	
64. The results and successes are shared by the services / departments / schools	0,912	
61. There is a spirit of collaboration between services / departments / schools	0,79	
65. The IPG organizes meetings between collaborators	0,762	
60. I can count on the support and involvement of the director	0,555	
57. Whenever necessary, I make an extra effort to achieve the best performance		0,857
58. I like my job		0,843
56. I always try to do my best		0,821

Table a5- Component Matrixes

	Component 7 Interpersonal relationships
18. There is a good relationship between colleagues	0,881
22. I am happy with the relationship with my colleagues	0,871
19. I feel professionally respected by my peers	0,87
21. The work environment between services / departments / schools is good	0,846
20. There is a spirit of collaboration between the services / departments / schools	0,842
23. I am happy with the relationship with the director	0,786

Table 6a - Component Matrixes

	Component 8 Training
39. Collaborators are encouraged to develop their skills	0,875
37. The IPG fosters the training of collaborators	0,832
13. The IPG has a clear career path for all collaborators	0,814
38. Training is important for the development of my career	0,39

Table a7- Component Matrixes

	Component 9 Commitment
10. I feel part of the IPG 'family'	0,839
5. I would recommend IPG as an organization to work for	0,835
4. I identify myself with the IPG culture	0,82
11. IPG deserves my loyalty	0,813
8. I feel emotionally attached to the IPG	0,798
3. I am recognized by society because of working in IPG	0,79
1. I am proud to work at IPG	0,736
12. I feel IPG problems as mine	0,718
16. Ensuring the quality of service is a daily concern for the IPG	0,689
28. My job at IPG is interesting	0,672
7. IPG tries to keep top talent	0,661
9. I feel I have a sense of obligation to the IPG	0,654

Table a8- Component Matrixes

	Component 10 Functions
27. I know what is expected of me in the exercise of my functions	0,761
29. My work enhances me professionally	0,734
15. I acknowledge my contribution to achieving the objectives of the IPG	0,723
2. I want to continue working in the IPG	0,63
24. There is a competitive climate in the IPG	0,564